

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



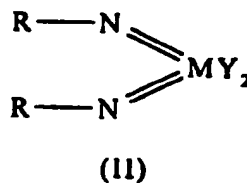
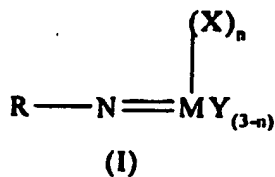
(11)

EP 0 816 384 A3

(12)

EUROPEAN PATENT APPLICATION(88) Date of publication A3:
07.01.1999 Bulletin 1999/01(51) Int Cl.⁶: **C08F 4/02, C08F 10/00,**
C08F 4/72(43) Date of publication A2:
07.01.1998 Bulletin 1998/02(21) Application number: **97304763.2**(22) Date of filing: **01.07.1997**(84) Designated Contracting States:
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC
NL PT SE(30) Priority: **02.07.1996 GB 9613814**(71) Applicant: **BP Chemicals Limited**
London EC2M 7BA (GB)(72) Inventors:
• **Gibson, Vernon Charles**
London SW7 2QA (GB)• **Reed, Warren**
Sunbury-on-Thames, Middlesex, TW16 7LN (GB)(74) Representative: **Hawkins, David George et al**
BP International Limited
Group Patents & Agreements
Chertsey Road
Sunbury-on-Thames, Middlesex TW16 7LN (GB)(54) **Supported polymerisation catalysts**

(57) Olefin polymerisation catalyst system based on a complex of formula I or II:



M is V, Nb or Ta in (I) or M is Cr, Mo or W in (II); R is alkyl or aryl, X is an organic group containing cyclopentadienyl, Y is a univalent anionic ligand; n is 0 or 1; the complex of formula (I) or (II) being supported on a substrate comprising a polyaminostyrene or a copolymer of styrene and aminostyrene. The catalyst is used with a cocatalyst, for example an organoaluminium compound or alumoxane. Preferred complexes are based on, for example, $\text{VC}_p(\text{N}^i\text{BU})\text{Cl}_2$ and $\text{V}(\text{N}^i\text{BU})\text{Cl}_3$.

EP 0 816 384 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

DOCUMENTS CONSIDERED TO BE RELEVANT			EP 97304763.2
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 6)
A	EP 0641804 A2 (BP CHEMICALS LIMITED) 08 March 1995 (08.03.95), claims 1,2,11,14. ---	1-11	C 08 F 4/02 C 08 F 10/00 C 08 F 4/72
A	DE 4428636 A1 (BASF AG) 15 February 1996 (15.02.96), claims 1,7,8, examples. ----	1, 3-7, 10,11	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 6)
			C 08 F 4/00 C 08 F 10/00 C 08 F 210/00
The present search report has been drawn up for all claims			
Place of search VIENNA		Date of completion of the search 27-10-1998	Examiner PUSTERER
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>A : member of the same patent family, corresponding document</p>			

EPO FORM 1503 (01.97) (P0401)